

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking to Create a
Consistent Regulatory Framework for the
Guidance, Planning and Evaluation of
Integrated Distributed Energy Resources.

Rulemaking 14-10-003
(Filed October 2, 2014)

**PETITION OF
THE SOLAR ENERGY INDUSTRIES ASSOCIATION AND
THE CALIFORNIA SOLAR & STORAGE ASSOCIATION
TO MODIFY DECISION 22-05-002**

**CALIFORNIA SOLAR & STORAGE
ASSOCIATION**

Brad Heavner, Policy Director
1107 Ninth St. #820
Sacramento, California 95814
Telephone: (415) 328-2683
Email: brad@calssa.org

**SOLAR ENERGY INDUSTRIES
ASSOCIATION**

Jeanne B. Armstrong
Senior Regulatory Attorney
Sacramento, California
Telephone: (916)-276-5706
Email: jarmstrong@seia.org

October 3, 2022

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In accordance with Rule 16.4 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the Solar Energy Industries Association (“SEIA”) and the California Solar & Storage Association (“CALSSA”) submit this Petition for Modification of Decision 22-05-002 (“Decision”). In compliance with Rule 16.4(d), this Petition is being filed within one year of the effective date of the Decision.¹

I. REQUESTED MODIFICATION AND SUMMARY OF ARGUMENT

In Decision 22-05-002, the Commission adopted changes to the Avoided Cost Calculator (“ACC”). Historically the ACC has been used to assess the cost-effectiveness of distributed energy resources (“DERs”) in the service territories of the major California investor-owned utilities (“IOUs”). More recently, the detailed hourly values in the ACC have been proposed to be used for ratemaking, as the basis for the rates to be paid for generation exported to the grid by net energy metering (“NEM”) customers.² This additional ratemaking use of the detailed hourly outputs of the ACC renders it imperative that the Commission ensure the ACC accurately

¹ In accord with Rule 16.4 (b) Appendix A to this Petition proposes specific wording to carry out all requested modifications to the Decision.

² See *Proposed Decision Revising Net Energy Metering Tariff and Subtariffs*, R. 20-08-020 (December 13, 2021).

reflects the value of DERs. Undervaluing DERs would have an adverse impact on California’s efforts to expand its reliance on DERs of all types, an expansion that is necessary to reduce greenhouse gas (“GHG”) emissions in conformance with SB 100’s clean energy goals for 2045³ as well as the state’s intermediate emission reduction targets for 2030.⁴ However, one of the changes made to the ACC as the result of Decision 22-05-002 – modification of the “No New DER” case – has produced an ACC that undervalues the GHG reductions from DERs and that is fundamentally at odds with California’s plans to reduce GHG emissions through electrification of buildings and transportation. The impact of this change to the No New DER case on ACC values, and the Energy Division’s approach to counteracting that impact, only came into focus subsequent to the issuance of the Decision. That impact and need for correction are material facts that warrant modification of the Decision.

The No New DER case has been described by the Commission as

[A] counterfactual load forecast that includes no new distributed energy resources installed after 2018. It represents what the forecasted load would be if no new distributed energy resources were to be installed.⁵

Previously, this definition of the No New DER case resulted in the removal of “load reducing” DERs – i.e., DERs that decrease or shift loads, or that substitute behind the meter (“BTM”) resources for utility-scale, supply-side resources. Such “load reducing” DERs include energy efficiency, demand response, BTM solar, and BTM storage. When the No New DER case was run through the RESOLVE capacity expansion model, the load reducing DERs were replaced by

³ SB 1020 (2022) establishes interim clean energy targets in addition to the current 100% clean by 2045 set by SB 100 (2018). Specifically, SB 1020 sets targets of 90% of all retail sales of electricity to California end-use customers by December 31, 2035, and 95% by December 31, 2040.

⁴ The Commission’s Integrated Resource Plan (“IRP”) process focuses on meeting intermediate 2030 emission reduction goals.

⁵ Resolution E-5077, p. 5.

additional zero-emission, supply-side renewable generation and storage resources that would be needed for the state to continue to meet the same GHG reduction goals. The costs of these replacement clean resources identified in the No New DER run were used to determine the avoided greenhouse gas values – the “GHG Adder” – used in the ACC.⁶ The resource portfolio identified in the No New DER run has also been used to determine the hourly marginal greenhouse gas emissions and hourly energy and ancillary services prices used in the ACC.⁷

The Decision modified the No New DER scenario to remove all DERs from that case, both load reducing and load increasing. These “load increasing” or “fuel substitution” DERs include electric vehicles and building electrification measures such as heat pumps. Thus, for the 2022 ACC the additional loads from transportation and building electrification DERs were removed from the base case to create the “No New DER” scenario.⁸ In making this change, the Commission stated that it “agrees that load growth should be removed from the ‘No New DER’ Scenario to accurately portray what the grid would look like if there were no ratepayer-funded distributed energy resource programs.”⁹ However, this new No New DER scenario for 2022 ACC was run assuming no change in the GHG reductions expected from the electric sector. Thus, this revised No New DER case no longer assumes that the electric sector has to include electrification DERs such as EVs and heat pumps that will reduce emissions in other sectors. In effect, this scenario assumes that the required emission reductions in transportation and buildings

⁶ The GHG Adder is determined by the RESOLVE’s “shadow price” for the GHG constraints in that model. It values the GHG costs that DERs can avoid, above the basic GHG allowance costs in the state’s GHG cap & trade (C&T) market, and thus is based on the long-term costs to meet the state’s goals for GHG emissions in 2030 and 2045.

⁷ See Decision 20-04-010, p. 38.

⁸ See Decision 22-05-002, p. 40.

⁹ *Id.*, p. 43.

will happen through some unspecified means other than electrification, at a cost that is no longer included in the electric sector. But this revised No New DER scenario is unrealistic, and contrary to the state’s current GHG reduction plans, which rely heavily on electrification of transportation and buildings.¹⁰

If the electric sector no longer has to provide substantial GHG reductions in transportation and buildings, then it will be much easier and less costly to meet the electric sector’s GHG reduction goals, assuming those goals remain the same. As will be detailed below, the RESOLVE results for the 2022 No New DER case show that California’s GHG goals for 2030 and 2045 can be met with fewer new resources, and at lower costs, than what are modeled in the Integrated Resource Proceeding’s (“IRP”) Preferred System Plan (“PSP”). The adopted PSP includes the load increasing DERs needed to meet the state’s electrification goals. Accordingly, the GHG Adder for the 2022 ACC is substantially below the GHG Adder modeled in the adopted PSP as well as below the GHG Adders modeled for the 2020 and 2021 ACCs.¹¹ The lower GHG Adder represents an undervaluing of the avoided costs of DERs based on the

¹⁰ For example, the first page of the California Air Resources Board’s draft 2022 Scoping Plan observes that squeezing the carbon out of every sector of the California economy requires electrification with clean energy: transportation electrification, building electrification, and renewable electricity supply:

“The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon reduction programs that have been in place here for a decade and a half. That means rapidly moving to zero-emission transportation, electrifying the cars, buses, trains, and trucks that now constitute California’s single largest source of planet-warming pollution. It also means phasing out the use of fossil gas used for heating our homes and buildings.”

See <https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf>.

¹¹ See, *2022 Distributed Energy Resources Avoided Cost Calculator Documentation* (August 12, 2022) (“2022 ACC Documentation”), p.32, available at <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/demand-side-management/acc-models-latest-version/2022-acc-documentation-v1b.pdf>

premise that the electric sector will no longer use fuel substitution / load increasing DERs to reduce GHG emissions in the transportation and building sectors. This premise is directly contrary to the IRP and the state's electrification plans, and either (1) assumes that California will not meet its 2045 GHG reduction goals, or (2) fails to reduce the electric sector's GHG emission targets to offset the emission reductions in transportation and buildings that will no longer occur through electrification. The Commission should not undervalue the avoided costs of DERs based upon a false depiction of how the state is planning to meet its GHG goals through electrification.

Accordingly, SEIA and CALSSA request that Decision be modified to remove the approved modifications to the No New DER case. The No New DER scenario should remove only "load reducing" DERs that decrease or shift loads. This will still result in a reasonable measure of the marginal cost of GHG reductions, without being contrary to the state's electrification efforts.

II. FACTS SUPPORTING ELIMINATION OF THE MODIFICATIONS TO THE "NO NEW DER" CASE

The No New DER Case was first introduced by Commission Staff in its proposal for updates to the 2020 ACC as a way to quantify marginal or avoided costs due to DERs by removing load reducing DERs. As explained therein:

To quantify the avoided cost value of the DERs that are included in the RSP, Staff proposes that the IRP modeling include a "No New DER" sensitivity case of the RSP. *Without the planned DER, RESOLVE will select more supply side resources to meet reliability and GHG targets, which will result in higher capital investment and annual operating costs.*¹²

¹² Energy Division Staff Proposal for 2020 Avoided Cost Calculator Update, Integrated Distributed Energy Resources Rulemaking (R.14-10-003) November 7, 2019), p. 9 (emphasis added).

In other words, the No New DER case was to indicate the increased supply side costs necessary to replace the load-reducing, demand-side DERs with comparable supply-side resources, while still meeting the same GHG goals.¹³

In adopting the No New DER case the Commission found that:

Although the No New DER scenario will not actually occur, *the outputs of the modeling tells us what it would cost to operate the grid replacing the distributed energy resources with supply-side resources*. The outputs provide the Commission with the best estimated value of the distributed energy resources.¹⁴

Modification of the No New DER case to also include load increasing DERs in the portfolio was first raised by the Joint IOUs in their Opening Testimony in this proceeding on the 2022 ACC. The entirety of their presentation consisted of the following:

The No New DER scenario is a counterfactual scenario that removes all “distributed energy resources associated with utility incentive programs and incremental to the distributed energy resources installed up to 2018” from the load forecast. However, the current No New DER scenario only removes utility incentive programs that *reduce* load from the forecast and does not make a similar adjustment for ratepayer-funded electrification programs that *increase* load (e.g., transportation and building electrification programs). The Joint IOUs propose that this correction be made to the load forecast underlying the No New DER scenario.¹⁵

Thus, the Joint IOUs provided no real justification for their proposed change to the No New DER case, nor any indication of the impact of their proposal on whether the resulting No New DER scenario would be consistent with the state’s policies to use electrification to reduce emissions in transportation and buildings.

In responding to the Joint IOUs’ proposal, SEIA noted that:

¹³ *Id.*, p. 11.

¹⁴ Decision 20-04-010, p. 37 (emphasis added).

¹⁵ Exh. IOU-01, *Joint Opening Testimony of Southern California Edison Company (U 338-E), Pacific Gas and Electric Company (U 39-E) and San Diego Gas & Electric Company (U 902-E) in Support of the Proposed Major Updates to the 2022 Avoided Cost Calculator* (September 27, 2021), p.14.

[T]he practical implications of implementing this proposal should be considered with actual comparative examples of the different outcomes to the No New DER modeling with RESOLVE, both including and excluding load-building DERs in the No New DER case. Parties should have the opportunity to review and comment on these examples.¹⁶

The CALSSA also submitted rebuttal testimony on the No New DER case, opposing it on the basis that removal of load increasing DERs would lead to an inaccurate load profile to be used as the basis for calculating avoided energy costs and marginal GHG emissions in the subsequent production cost runs, and also on the basis that it was inconsistent with the purpose of the ACC which is to determine the costs that are avoided when load on the system is reduced.¹⁷ CALSSA was unable to address any anomalous impacts which the proposed modification to the No New DER Case would have on any element of the ACC because specific impacts of the modifications had not been demonstrated by the Joint IOUs.

Subsequent to the close of the evidentiary record in the proceeding, the Commission Staff released its proposal for updating the 2022 ACC.¹⁸ Therein, the Staff incorporated the Joint IOUs' idea of modifying the No New DER case to also remove load increasing DERs from the No New DER portfolio. Similar to the Joint IOUs' testimony, the Staff Proposal provided no substantive justification for the change, only observing that "With electrification load growth removed, by 2040 the total load in the No New DER scenario will be lower, instead of higher, than the [Preferred System Plan] PSP portfolio."¹⁹ The Staff Proposal did not comment on whether this idea was consistent with the state's GHG reduction plans or policies, did not

¹⁶ Exh. SEIA-02, *Prepared Rebuttal Testimony of R. Thomas Beach on behalf of the Solar Energy Industries Association*, (October 11, 2021), p.10.

¹⁷ See Exh. CSA-01, *Rebuttal Testimony of Steve Letendre*, pp. 2-3.

¹⁸ Integrated Distributed Energy Resources (IDER) 2022 Update Avoided Cost Calculator (ACC) Staff Proposal (November 30, 2021) ("Staff 2022 ACC Proposal"), p. 29.

¹⁹ *Id.*

comment on whether the GHG goals for the electric sector still made sense with this change, and provided no modeling runs of their proposed modification to the No New DER case to illustrate its effect on the results. As a result, relying on the rudimentary discussion in both the Joint IOU's testimony and in the Staff Proposal, SEIA did not oppose the modification to the No New DER case per se. SEIA did, however, expressly note that parties should have the opportunity to consider the practical implications of the proposal and clearly stated that it should only be adopted if certain caveats applied – neither of which were adopted by the Commission. These caveats included the key proviso that the “No New DER modeling captures the marginal costs to replace these (load-increasing) DERs.”²⁰ As discussed above, the current No New DER case fails to meet this condition because it assumes no change in the electric sector’s GHG goals even if there are no load-increasing DERs and thus no GHG reductions from transportation or building electrification.

CALSSA maintained its opposition to the the modification to the No New DER case in Opening Brief. CALSSA continued to point out that the methodology developed by Staff and approved by the Commission for the No New DER case was designed specifically to capture avoided costs associated with DERs that *reduce* load.²¹ CALSSA explained that “if the Commission chooses to begin using the ACC to evaluate avoided costs from measures that increase load, it will need to develop a separate counterfactual for that purpose.”²² Neither Staff nor the Joint IOUs had performed such an exercise. Moreover, CALSSA, like SEIA, could not

²⁰ See *Opening Brief and Comments of the Solar Energy Industries Association on Proposed Changes to the 2022 Avoided Cost Calculator*, R. 14-10-003 (December 22, 2021), p. 18.

²¹ See *Opening Brief of the California Solar & Storage Association*, R. 14-10-003 (December 22, 2021), p. 6.

²² *Id.*, p. 8.

have commented on the anomalous impacts that the modified No New DER case would have on the ACC because those impacts were not demonstrated in the Staff Proposal.

On May 20, 2022, in accordance with the Decision, the Commission Staff released SERVUM data for the 2022 ACC Update, as well as the RESOLVE modeling of the now modified No New DER case. It was at that time that the policy inconsistency created by the modified No New DER case became clear.

As explained above, prior to modification, the No New DER case removed only “load reducing” DERs that reduce, or shift loads or that replace supply-side resources with generation that serves load behind the meter. As a result, the 2020 and 2021 No New DER Cases had significantly *higher* loads than their base PSP scenarios, and the RESOLVE modeling of these No New DER cases produced resource portfolios serving higher loads, and using more expensive utility-scale resources in order to meet the same GHG goals for the electric sector.²³ Then, in accord with the directives of D. 20-04-010, the 2020 and 2021 ACCs used the 2030 marginal costs of meeting the 2030 GHG emissions goal in these No New DER cases as the basis for the GHG Adder component of the ACC, resulting in GHG Values of \$202 per MT and \$110 per MT in the 2020 and 2021 ACCs, respectively.²⁴ The GHG Value is the sum of the GHG Adder determined in RESOLVE plus the GHG C&T allowance price. These results are shown in the solid green and orange lines in **Figure 1** below. The dashed green and orange lines show the

²³ See Table 2 at page 5 of the 2020 ACC documentation and Table 3 at page 13 of the 2021 ACC documentation. These tables show only load decreasing DERs. Compare these to Table 3 at page 14 of the 2022 ACC documentation, which shows both load increasing and load decreasing DERs.

²⁴ For the 2020 ACC GHG Value in 2030, see Figure 17 (Option 1), at page 23 of the 2020 ACC documentation; the \$202 per MT GHG Value is also indicated in the 2020 ACC electric model, at cell Z9 of the “Emissions” tab. For the 2021 ACC GHG Value in 2030, see Figure 26 (GHG Value) at page 31 of the 2021 ACC Documentation. The \$110 per MWh GHG Value is also indicated in the 2021 ACC electric model, at cell Z9 of the “Emissions” tab

lower 2030 GHG Values from the base IRP scenarios for the 2020 and 2021 ACCs, before load reducing DERs were removed.

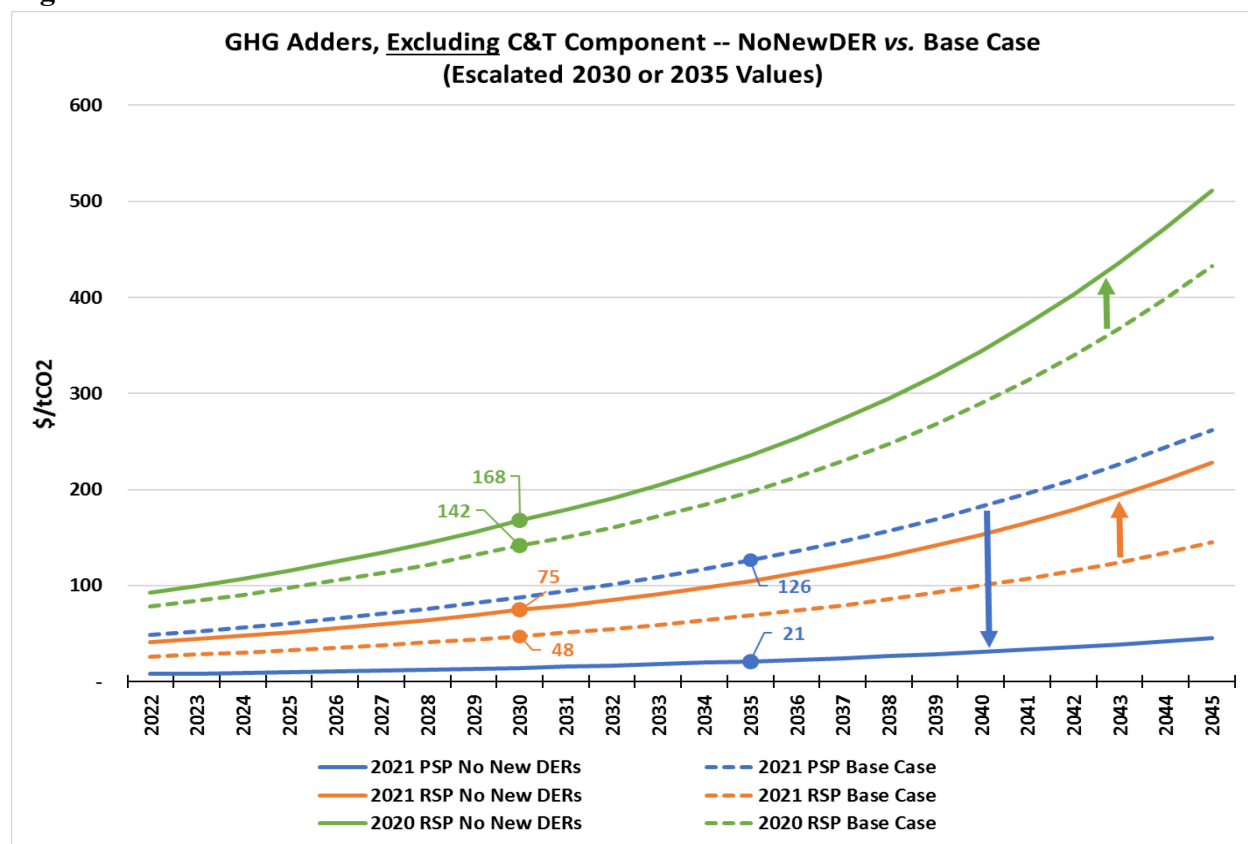
In contrast, the modeling of the modified No New DER case for the 2022 ACC, which removes both load reducing and load increasing DERs from the forecast, results in a No New DER case that has a significantly *lower* loads than the base case PSP scenario, especially in 2030 and subsequent years.²⁵ Thus, based on the model, there is less need for additional utility scale resources in order to meet the 2030 and 2045 GHG emission goals – which continue to be 38 MMT and 15 MMT respectively, even though the electric sector is no longer using load-increasing DERs to reduce emissions from transportation and buildings.²⁶ In other words, the GHG goals for 2030 and 2045 can be met with fewer new resources than in the IRP PSP, and at lower costs. Specifically, using 2030 as the anchor year (as had been directed in D. 20-04-010), the GHG Adder from the 2022 No New DER case is **zero**, meaning that there are no additional long-term costs to add clean resources to meet the 2030 GHG goals.²⁷ It was only by changing the anchor year for the GHG Adder to 2035 that the 2022 ACC has a non-zero GHG Adder, as shown by the solid blue line in Figure 1.

²⁵ See 2022 ACC Documentation, p.15. The bottom rows of Table 3 show lower “No New DER Load” than “PSP Load

²⁶ See Decision 22-02-005, p.193 , Conclusion of Law, 7 ; see also Opening Comments of the Solar Energy Industries Association and the Large-scale Solar Association on the Proposed Decision Adopting the Preferred System Plan, R.20-05-003 (January 14, 2022) p. 12 (documenting that the PSP includes a GHG emissions level for the electric sector of 15 million tons (MMT) in 2045)

²⁷ See, 2022 ACC Documentation, p. 31. This method is the same as what was used in the 2021 ACC but adjusted to start from 2035 due to zero ‘GHG Adder’ value in 2030 (explained below).”

Figure 1



The anomaly of a zero GHG Adder in 2030 in the 2022 ACC’s No New DER scenario resulted in Commission staff deviating from the Commission approved methodology for determination of the adder and, instead, utilizing the 2035 GHG shadow price from RESOLVE (rather than the 2030 shadow price) as the anchor value for the GHG Adder in the 2022 ACC.²⁸ In their informal comments on the draft ACC material distributed by Energy Division in June, 2022, the Joint IOUs questioned the use of 2035 as the anchor year for the electric sector GHG value, because 2030 had been the only anchor year approved by the Commission. In response, Energy Division stated that:

D.22-05-002 declined to update the methodology for determining the GHG value, which is described in D.20-04-010. While it is true that 2030 has been used in the past as the anchor year, D.20-04-010 states that “we direct staff to continue using

²⁸ *Id.*, p. 31.

the straight-line adder previously adopted by the Commission but consider modifying the values based on post 2030 data.”²⁹ Accordingly, 2035 was chosen as the anchor year because the GHG values in 2030 (and 2032) are zero.³⁰

As a result of using 2035 as the anchor year, the anchor GHG Value for the 2022 ACC is \$70 per MT in 2035 (consisting only of GHG C&T costs, with zero GHG Adder), a substantial reduction from the \$175 per MT in the 2021 PSP base case, as shown in Figure 1. On September 15, 2022, by way of Resolution E-5228, the Commission adopted this GHG Value as part of the 2022 ACC.

III. ARGUMENT

A. The Modified No New DER Case Negates the Desired Consistency between the ACC and the IRP

Decision 22-05-002 repeatedly emphasized the “importance of aligning the Avoided Cost Calculator with the Integrated Resource Proceeding.”³¹ As stated by the Commission, [t]he intention of the Commission in adopting such an alignment is to ensure that all resources are evaluated equally, be they distributed energy resources or supply side resources.”³² The Commission further pointed out “the IRP is the proceeding to chart the electric sector’s path to decarbonization”³³ and that it has repeatedly stated “that the Avoided Cost Calculator should align with the IRP proceeding, not the other way around” as such alignment ensures “an accurate reflection of current [demand side and supply side] resource planning objectives.”³⁴ Moreover, the Commission concluded that consistency between the ACC and the IRP was of such

²⁹ D.20-04-010, Section 7.1.4, p. 43.

³⁰ See Energy Division Responses to 2022 Informal ACC Comments, p.6; see also Resolution; see also Resolution E-5228 (September 15, 2022), p.8.

³¹ Decision 22-05-002, p. 3.

³² *Id.*

³³ *Id.*, p. 39.

³⁴ *Id. citing* D. 20-04-010, p. 24.

importance that an outdated natural gas price forecast (from the 2020 IEPR) should be used in the 2022 ACC to maintain consistency with the IRP.³⁵ The use of the modified No New DER case, however, turns the desired consistency between the ACC and IRP on its head and in no way ensures an accurate reflection of demand planning objectives. In fact, it ignores them.

Specifically, as referenced above, in the IRP, the adopted PSP includes GHG emission goals for the electric sector of 38 MMT in 2030 and 15 MMT in 2045. These emission reduction goals also support reductions in emissions from transportation and buildings resulting from fuel substitution DERs (e.g., electric vehicles and electric heat pumps and other forms of building electrification), which are included in the PSP, and which result in an increase in overall electric loads. When removing the load resulting from these DERs in the modified No New DER case, the assumption must be made that the emission reductions associated with these DERs have not occurred. Absent the emission reductions of the fuel substitution DERs, the electric sector GHG goals in the No New DER case must be lowered significantly, to account for the transportation and building emission reductions that EVs and heat pumps are no longer providing. However, the modeling performed by Commission Staff for the No New DER case did not do this, but rather assumed the same electric sector GHG goals of 38 MMT in 2030 and 15 MMT in 2045.³⁶ Consequently, the modeling results reflect a scenario in which the electric sector can readily meet the Commission established GHG goals because electric loads are much lower, and the electric sector is assumed no longer to need to help the transportation and building sectors to reduce their emissions. But this case is completely unrealistic – and is inconsistent with both

³⁵ *Id.*, p. 79.

³⁶ We reviewed the Energy Division's No New DER modeling results for the 2022 ACC. This "2021 PSP NoNewDER RESOLVE Package" includes a "CPUC IRP RESOLVE_Scenario Tool 2021-12-23_NoNewDER_FINAL.xlsb" worksheet, in which cell D35 of the "Scenario Settings" tab shows the CAISO GHG target is "38 MMT by 2030 statewide."

state GHG reduction plans and with the IRP PSP, both of which assume that the least-cost path to the state's GHG reduction goals is an electrification path that requires the electric sector to bear a significant share of the GHG reductions in transportation and buildings.

While SEIA and CALSSA acknowledge that the No New DER case is intended to be counterfactual – representing how the state would reach its clean energy goals in the absence of certain DERs – a case in which those clean energy goals are not realized does not meet the purpose. But that is exactly what occurs when the modified No New DER case is modeled, i.e., it values DERs in a world in which California will not be using the electric sector to reduce GHG emissions in the transportation and building sectors.

The use of the modified No New DER case in the 2022 ACC is inconsistent with the state's electrification goals for buildings and transportation, undercuts the desired alignment between the IRP and the ACC proceedings, and fails to approach the desired goal that all resources – whether demand-side or supply-side – be valued fairly.

B. The Modified No New DER Case Results in Undervaluing DERs and Will Have a Negative Impact on Meeting California's GHG Reduction Goals

The Commission is considering use of the ACC to set the export compensation rate for customers on the successor NEM tariff. Undervaluing the solar resource will impact the number of customers that elect to install solar or solar + storage, adversely impacting California's efforts to expand its renewable generation capacity and meet its 2030 and 2045 GHG emission goals. The Commission has previously recognized the negative impact which undervaluing DERs has on meeting the state's GHG targets. Specifically, in D. 17-08-022, the Commission addressed the fact that the then-current ACC did not reflect the cost impacts of the 2030 GHG targets, determining that:

[T]he current avoided cost calculator does not properly reflect the impact of the 2030 greenhouse gas targets adopted in SB 32. Furthermore, the Commission

agrees that without this information, the [Energy Efficiency] Potential Study and, subsequently, the energy efficiency goals will not be accurate. As explained in the Addendum, *without an interim adder reflecting SB 32 targets, the energy efficiency program could experience a decrease in budgeting due to perceived lower cost-effectiveness only to need an exponential increase in program output once the adder is updated and the budget is adjusted. This Decision concludes that an immediate interim solution to a greenhouse gas adder should be adopted to avoid a disruptive effect on the Commission's energy efficiency program in the near term and improve the chances of meeting SB 32 and SB 350 targets in the long term.*³⁷

In short, the Commission determined that the lack of an adequate GHG adder reflecting the impact of the 2030 GHG targets adopted by the state would result in undervaluing energy efficiency programs and thereby have a negative impact on meeting the state's climate goals. The same problem exists again with the 2022 ACC, and absent modification of D. 22-05-002 to remove fuel substitution DERs from the No New DER scenario, the same undervaluing of DERs will result. The marginal GHG adder will be dramatically reduced and DERs will be undervalued, resulting in decreased deployment.

C. Staff's Actions are Evidence that Irregular Results of the No New DER Case were Not Contemplated

Use of the modified No New DER case gave rise to an anomalous GHG Adder – zero in 2030. In other words, the No New DER case showed that there would be no cost above the existing cap & trade market to meeting the electric sector's GHG reduction goals in 2030. To its credit, Energy Division recognized this result as entirely unrealistic, prompting it to potentially exceed its authority and change the Commission-approved methodology for determining the GHG Adder. As referenced above, in D. 20-04-010, the Commission approved the use of 2030 as the anchor year for the determination of the adder. This was not changed in D. 22-05-002.

³⁷ D. 17-08-022, p.6 (emphasis added).

While acknowledging this, Commission Staff asserted that D. 20-04-010 afforded it the authority to modify the values based on post-2030 data. Staff's assertion is questionable at best.

In D. 20-04-010, the Commission stated

While maintaining the straight-line greenhouse gas adder, as used in the current Avoided Cost Calculator, based on party comment, we authorize staff to consider modifying the adder such that it is based on post-2030 values to better reflect average long-term greenhouse gas abatement costs. The Director of the Energy Division is authorized to host a workshop no later than ten days following the issuance of the draft resolution updating the Avoided Cost Calculator in compliance with this decision. *The purpose of the workshop is to review the analysis of the post-2030 values with parties, prior to consideration by the Commission of the draft resolution adopting a 2020 updated Avoided Cost Calculator.*³⁸

While Commission Staff was clearly granted the authority with respect to the 2020 ACC to modify the GHG Adder such that it was based on post-2030 values, there is nothing in D.20-04-010 which extended this authority beyond the 2020 ACC. With respect to the GHG Adder for the 2022 ACC, Staff was compelled to reach outside its authority and to modify the methodology for determining the GHG Adder, in order to mitigate the nonsensical results produced by use of the modified No New DER case. Staff's actions are evidence that the irregular results produced by the modified No New DER case were not contemplated at the time of its adoption by the Commission. Unfortunately, the Staff did not take the next steps to consider the broader implications of such a precipitous drop in the GHG Adder, and whether the modified No New DER scenario's elimination of all GHG reductions from transportation and building electrification is consistent with state policy, with the PSP adopted in the IRP, and with California meeting its ambitious GHG reduction goals. In this Petition for Modification, SEIA and CALSSA are asking the Commission to take these next steps, to consider the broader policy

³⁸ D. 20-04-010, p.40.

ramifications of this modification to the No New DER scenario, and to conclude that this change to the No New DER scenario should not have been made.

III. CONCLUSION

For the reasons stated herein the Commission should modify Decision 20-05-002 to remove the approved modifications to the No New DER case. Subsequent to that determination the Commission should direct the Energy Division to rerun the 2022 ACC utilizing a No New DER case which removes only load reducing DERs.

Respectfully submitted the 3rd day of October 2022 at San Francisco, California.

By: /s/
Jeanne B. Armstrong

Senior Regulatory Attorney
Solar Energy Industries Association
Sacramento, California
Telephone: (916)-276-5706
Email: jarmstrong@seia.org

DECLARATION OF R. THOMAS BEACH

I, R. Thomas Beach, declare as follows:

I, R. Thomas Beach, am principal consultant of the consulting firm Crossborder Energy, a consultant to the Solar Energy Industries Association (“SEIA”). I have testified on behalf of SEIA in the California Public Utilities Commission (“Commission”) proceedings updating the 2020 and 2022 Avoided Cost Calculators (“ACC”), as well as consulting on SEIA’s behalf in the Commission resolution process on the 2020, 2021, and 2022 ACCs. I have reviewed the document entitled “Petition of the Solar Energy Industries Association and California Solar & Storage Association to Modify Decision 22-05-002.” If called as a witness, I could attest to the factual statements contained therein.

I declare under penalty of perjury under the laws of the state of California that foregoing is true and correct.

Executed on this 3rd day of October 2022, at Berkely California.

/s/
R. Thomas Beach

APPENDIX A

Requested Changes to Decision 20-05-002

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The purpose of the "No New DER" Scenario is to create a hypothetical counterfactual of what the grid would look like if there were no ratepayer funded distributed energy resources programs. This decision ~~corrects~~ maintains the current "No New DER" Portfolio by accounting for all load reducing distributed energy resources, ~~both load reducing and load increasing~~. As described below, transportation and building electrification load ~~are~~ will not be added to the list of distributed energy resources removed from the base case to create the "No New DER" scenario.

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The Commission finds the recommendation by Energy Division - to revise the "No New DER" Scenario by removing distributed energy resources that add load --is not justified. The Staff Proposal contends this revision is necessary to properly value the avoided costs of distributed energy resources. ~~As underscored by Joint Utilities, distributed energy resources are statutorily defined as including electric vehicles.~~ The Commission does not agree s that load growth should be removed from the "No New DER" Scenario. ~~to accurately portray what the grid would look like if there were no ratepayer funded distributed energy resource programs.~~ Commission Staff has not demonstrated that the removal of load growth DERs will advance the accuracy of the ACC.

Findings of Fact

32. Removing distributed energy resources that add load from the "No New DER" Scenario negates the alignment between the IRP and the ACC. ~~accurately portrays what the grid would look like if there were no ratepayer funded distributed energy resources programs.~~

33. The recommendation to revise the "No New DER" Scenario by removing distributed energy resources that add load is not justified.

Conclusions of Law

11. Load growth distributed energy resources should not be removed from the "No New DER" Scenario.